5

10

15

20

## **ABSTRACT**

Estimates of a communication system configuration, such as a DSL system, are based on operational data collected from a network element management system, protocol, users and/or the like. The operational data collected from the system can include performance-characterizing operational data that typically is available in an ADSL system via element-management-system protocols. Generated estimates and/or approximations can be used in evaluating system performance and directly or indirectly dictating/requiring changes or recommending improvements in operation by transmitters and/or other parts of the communication system. Data and/or other information may be collected using "internal" means or may be obtained from system elements and components via email and/or other "external" means. The likelihood of a model's accuracy can be based on various data, information and/or indicators of system performance, such as observed normal operational data, test data and/or prompted operational data that shows operating performance based on stimulation signals. One example of such prompted data uses frequency carrier masks to approximate the Hlog of a given channel, including information regarding bridged taps, attenuation, etc.